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Cooperative Extension Work in Agriculture and Home Economics

United States Department of Agriculture and State Agricultural Colleges, Cooperating

Status and Results of Extension Work in the Southern States

1903–1921

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THE Office of Extension Work in the South and the Office of Extension Work in the North and West were combined into one office on October 1, 1921, by order of the Secretary of Agriculture, to be known thereafter as the Office of Extension Work. Since the two offices operated independently and under different appropriations and somewhat different policies, it seems proper that they make separate final reports covering the 1921 operations and results. It also appears desirable to preface this final report with a historical outline of early conceptions of the demonstration idea and its growth and development in the South up to date. This would complete the records and close an era in two interesting and perhaps far-reaching pieces of contemporary work, and prepare the way for the reception of the new organization covering the whole country.

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STATUS AND RESULTS OF EXTENSION WORK IN THE SOUTHERN STATES, 1903–1921.

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EARLY HISTORY AND DEVELOPMENT OF EXTENSION WORK IN THE SOUTH.

INTRODUCTION.

Agriculture is the fundamental industry in the United States, and has been recognized by the leaders in national affairs from the beginning as essential to the life and prosperity of the Nation. Notwithstanding this general recognition of the importance of agriculture, it is only in comparatively recent years that any very definite attention has been given to improved methods and permanent development. Early mention is found of local organizations or societies that considered farm problems. Most of them were short-lived, of limited influence, and without public support. It is within the last 35 years that the farmers' problems began to receive concerted systematic consideration as national problems. It is very probable that the influence of the few widely scattered early agricultural societies caused some of the forward-thinking men to get a vision of the possibilities and needs along this line and led them to formulate plans that resulted in establishing the great agricultural and industrial institutions which are now so generally recognized and supported by National and State legislatures and which have become such potent factors for the agricultural development and material upbuilding of each State.

The passage of the Morrill Act in 1862 was the first national aid to State schools. This led to the establishment of agricultural instruction in State universities and colleges throughout the country. In 1887 Congress passed the Hatch Act, by which, under certain conditions, each State receives Federal support for conducting experiment stations in connection with the State agricultural colleges. The effective and far-reaching investigational work done by these early experiment stations marked the beginning of a great movement for the development and improvement of agriculture.

In addition to the resident teaching and investigational work done by these institutions in the South, they undertook to carry information to the farming people through publications and by lectures and the distribution of bulletins at farmers' meetings away from the institutions. Some of the State colleges and State departments of agriculture organized farmers' institutes to carry to the country districts the latest information and instruction for the improvement of the rural conditions. Most of the institute speakers were from the college or experiment station staff, but good farmers were sometimes temporarily secured to assist in the work. It is hard to estimate the influence these annual institutes, or farmers' meetings, had in creating interest in better farming and promoting the idea of organized demonstration or extension work. The chief drawbacks to this method of reaching the remote districts were limited financial support, small available working forces, and too frequent meetings in small towns instead of in country communities or on a good farm, meeting but once a year, no system of follow-up work to keep the farmer interested or instructed, and worst of all, failure to reach the nonprogressive, nonreading farmer, who needed the message most.

To reach, to interest, and help this large percentage of the people of the rural districts, to improve conditions and increase the family income, and to give a broader outlook and create higher ideals of country life were the problems that faced the early agricultural leaders. These leaders well knew of the vast store of accumulated information in the State agricultural colleges and in the United States Department of Agriculture that the farmers needed and should have, but occasional institutes and the distribution of printed bulletins had failed to influence more than a very small percentage to translate the information into actual farm practice. It gradually dawned upon some of those interested in getting the lessons across to the average man that new methods were needed to supplement what was already being done. The great need was for men with good training and practical experience, living and working in close touch with the farmer, who could translate scientific knowledge into terms which the farmer could understand, and for an organized system through which this knowledge could be given to the farmer as he needed it and developed ability to make practical use of it.

DEVELOPMENT OF COUNTY DEMONSTRATION WORK.

Important events and movements of the world have been precipitated by apparently insignificant happenings. The Mexican cotton-boll weevil was the small insect that afforded the opportunity for beginning a line of work that has now been incorporated into the laws of the Nation and the States. The idea was that of teaching the man, the woman, the boy, or the girl by demonstrations or object lessons on their own farms and in their own homes to do things with their own hands. Dr. S. A. Knapp was the first man conceiving this idea who had the faith, the patience, the personality, and the ability to seize upon the favorable conditions under which to put it into practical application.

The boll weevil crossed from Mexico to Texas in 1892. In 10 years it spread practically all over that State. The damage and demoraliza-

tion that followed had paralyzed all lines of business. The State authorities had failed to cope with the situation, so in 1903 the State appealed to Congress for help, claiming that it had become a national problem. Previous to this time, Doctor Knapp had conducted some work in Texas for the United States Department of Agriculture. He had already established a community demonstration farm at Terrell, not directly for fighting the boll weevil, as has frequently been stated, because, up to this time, no weevil damage had been reported in this immediate section. The farm was established to prove the wisdom of crop diversification and to carry out Doctor Knapp's long-cherished idea that an object lesson was the best method of educating and instructing the average person. This first demonstration contained 70 acres on the farm of Walter Porter. Porter agreed with Doctor Knapp to try out his cropping system and to follow instructions in growing the crops, under certain conditions, chief of which was to be guaranteed against loss by the operation. This illustrates the difficulties the agents had in getting the farmers' cooperation in the early days of demonstration work. However, the business men of Terrell placed a sum of money in the bank to indemnify Porter for any losses he might sustain. Doctor Knapp visited the farm monthly to give instructions in methods of growing the crop. The business men also appointed a committee to visit the farm regularly to see that instructions were being carried out and records kept. It is sufficient to say here that the demonstration was a success. Porter made more on the 70 acres than he had ever made on the same amount of land. He is still a good demonstrator, applying improved methods to all phases of his farming operations.

In 1903 Congress, by an amendment to another bill, made available a sum of money to enable the Secretary of Agriculture to meet the emergency caused by the ravages of the boll weevil. This money was divided among several offices and bureaus, with the idea of attacking the problem from several different angles. A small amount of it was given to Doctor Knapp to try out his demonstration in good farming as a means of relieving the distress.

Of the second appropriation made to fight the boll weevil, which became available January, 1904, about $25,000 was given Doctor Knapp to continue the cooperative demonstration work. A few agents were employed and sent out through the boll-weevil districts in Texas. They first called meetings of farmers and business men and told them that the department believed that cotton could be grown successfully in spite of the weevil, and made certain recommendations that had been worked out by the entomologist and others who had been studying the problem. They endeavored to establish a few demonstrations along railroad lines in several counties to test these ideas.

In order to get the farmers to agree to set aside a certain acreage for these demonstrations, the business men agreed to supply funds to purchase seed and fertilizers for the farmers as a bonus to encourage them to follow the instructions. The cooperation of business men and others was sought and secured from the beginning.

The first agents covered from 10 to 15 counties. They held meetings, invited all the farmers, and at each place a few who were

willing to follow instructions were asked to become demonstrators. After a farmer agreed to become a demonstrator the agent visited his farm as often as possible and also sent instructions by letters, circulars, and bulletins. Invariably these demonstrations were located where they could be easily seen by the largest number of people. When the agent visited demonstration farms the neighboring farmers were notified beforehand, so a field or community meeting could be held on the demonstration farm. In this way the instruction could be given to a group at the one visit. Because no other crops were considered for the first two or three years the early demonstrations were called "cotton culture farms." The work grew rapidly in Texas and soon spread into Louisiana, Oklahoma, and Arkansas. The results obtained in every instance were strikingly successful and the work began to attract more than local attention.

In the spring of 1905 Dr. Wallace Buttrick, secretary of the General Education Board, after a visit to Texas, during which he saw the demonstration work's success, recommended it to his board as a method with great possibilities for extending agricultural education to the masses of farm people. In 1906 Secretary of Agriculture James Wilson and Doctor Buttrick, representing the General Education Board, entered into an understanding by which the board agreed to finance a similar line of work in the nonboll-weevil territory, where under the law the congressional appropriation could not be used. In 1906 the board contributed $10,000 to start the work in Mississippi, Alabama, Georgia, and in other States east of the Mississippi River. The distribution of this money, the employment of agents, and the supervision of their work was turned over to Doctor Knapp to handle in the same way as the work financed from money given by Congress.

Up to this time, as already stated, cotton was the only crop considered. It was soon realized that to successfully meet the situation the whole farming system must be changed in the cotton territory, so demonstrations in corn, legumes, and live stock were planned. The language of the appropriation act was so changed as to allow this to be done. No direct appropriation was made for cooperative demonstration work until 1909. Until this time the amount used was given through the Bureau of Plant Industry. The chief of that bureau allotted to it increased amounts from the yearly appropriations to the bureau.

In 1910 an appropriation bill was passed definitely setting aside "for the study and demonstration of the best methods of meeting the ravages of the Mexican cotton-boll weevil, fifty thousand dollars." The appropriations for the following two years were made in the same language. Although the amount of the department funds was increased each year, it was not until 1913 that the wording of the bill, under strict interpretation, was made broad enough to allow the money given by Congress to be used for the promotion of all lines of farming. In the States financed by the General Education Board, the agents were never limited to certain crops.

The table following shows the growth of financial support for the work from the beginning to 1921, inclusive.

Expenditures from all sources farmers' cooperative demonstration and extension work from 1904 to 1921, inclusive.

Year.	U. S. Department of Agriculture.		General Education Board.	Smith-Lever.			
				Regular.		Supplementary.	
	Farmers' cooperative demonstration work.	Other bureaus.		Federal.	State.	Federal.	State.
1904	$27,316						
1905	40,163						
1906	37,677		$7,000				
1907	39,976		31,000				
1908	85,901		69,000				
1909	102,898		76,000				
1910	219,107		102,000				
1911	243,246		120,000				
1912	335,856		128,000				
1913	330,014		142,050				
1914	371,800		187,500				
1915	661,217			$147,788			
1916	607,300	$110,863		425,517	$275,517		
1917	576,415	93,179		655,105	505,105		
1918 [1]	581,304	108,956		884,761	734,761		
1919 [1]	576,280	252,680		1,114,288	964,288		
1920	495,000	168,581		1,343,880	1,193,880	$674,629	$674,629
1921	494,800	88,070		1,573,476	1,423,476	688,977	688,977
Total	5,826,270	822,329	862,550	6,144,815	4,897,027	1,363,606	1,363,606

Year.	State.	County.	College.	Other.	Total.
1904					$27,316
1905					40,163
1906					44,677
1907		$2,800			73,976
1908		4,200			159,101
1909		14,297			193,695
1910		33,714			354,821
1911		76,622			439,868
1912		175,054			638,910
1913		272,568			744,633
1914		411,179			970,479
1915		720,643			1,539,649
1916	$80,469	470,517	$59,957	$50,631	2,049,246
1917	54,175	632,499	33,733	91,632	2,617,335
1918 [1]	78,635	718,081	7,845	84,880	3,198,925
1919 [1]	87,598	1,000,582	26,330	50,227	4,072,076
1920	52,449	718,845		30,424	5,252,338
1921	242,424	1,050,621		66,350	6,316,370
Total	595,750	6,302,222	127,865	374,144	28,733,578

[1] Not including emergency funds for stimulating agricultural production which was available during this year.

One striking thing shown in the above table is the increasing funds provided from local or county sources. This is strong evidence that the services are appreciated by the people.

The money given by the General Education Board proved a great help in the pioneer days. It hastened the spread of the demonstration doctrine and made it possible to establish lines of work that could not have been accomplished under public funds at that time. Effective July 1, 1914, Congress appropriated, in the Smith-Lever Cooperative Extension Act, sufficient funds to take over the entire work.

COUNTY AGENT WORK.

The first county agent whose work was confined to a single county was W. C. Stallings, of Smith County, Tex., who was appointed in 1906. Part of his salary was paid from department funds and part by a contribution made by the business men of the county. The following year two agents were appointed in Louisiana and five in other counties in Texas on a similar cooperative basis. In 1908, in Mississippi, W. D. Clayton, now county agent in Louisiana, was appointed as the first county agent, a part of his salary being paid

FIG. 1.—County agent instructing a group of farmers.

from public funds appropriated by the county. From this date the number of county agents grew very rapidly and the work was extended to other States (Fig. 1). In 1908 the boys' club work was started and in 1910 the girls' club work was begun. In 1913 the home demonstration feature for adult women was added. On July 1, 1914, when the Smith-Lever Act became operative, there were 1,138 agents employed in the 15 Southern States in all lines.

The table following shows the growth of the extension work by States and years from 1904 to 1921, inclusive.

Number of agents engaged in farmers' cooperative demonstration work since its beginning in 1904 to 1921, inclusive, in cooperation with colleges, counties, and local organizations.

State.	1904	1905	1906	1907	1908	1909	1910	1911	1912
Texas	.....	.....	.....	20	28	55	65	71	134
Oklahoma	.....	.....	.....	.....	8	16	30	34	54
Louisiana	.....	.....	.....	9	13	44	46	49	60
Arkansas	.....	.....	.....	6	12	28	50	54	68
Mississippi	.....	.....	.....	7	23	37	40	54	78
Alabama	.....	.....	.....	5	17	32	43	83	95
Georgia	.....	.....	.....	.....	7	28	53	57	86
Florida	.....	.....	.....	.....	.....	2	14	14	40
South Carolina	.....	.....	.....	.....	15	27	43	56	69
North Carolina	.....	.....	.....	.....	13	24	51	51	73
Virginia	.....	.....	.....	2	17	24	28	50	65
Maryland	.....	.....	.....	.....	.....	.....	.....	.....	6
Tennessee	.....	.....	.....	.....	.....	.....	1	10	23
Total	[1] 15	[1] 20	[1] 25	49	153	317	464	[2] 583	[2] 851

State.	1913	1914	1915	1916	1917	1918	1919	1920	1921
Texas	116	133	128	128	137	307	306	223	221
Oklahoma	54	67	83	91	101	176	184	145	136
Louisiana	54	68	58	73	83	150	150	100	92
Arkansas	71	80	83	102	124	189	188	137	114
Mississippi	68	80	84	90	129	190	206	155	128
Alabama	91	101	95	103	108	183	155	140	133
Georgia	99	112	118	132	195	265	277	184	194
Florida	40	61	66	71	83	160	134	100	91
South Carolina	68	84	84	88	91	131	152	111	112
North Carolina	91	108	116	125	134	218	217	151	138
Virginia	79	92	99	92	123	212	203	137	128
Maryland	7	18	23	28	41	72	68	53	51
Tennessee	40	49	67	86	118	203	175	100	89
Kentucky	.....	43	69	72	83	132	114	93	121
West Virginia	.....	42	56	69	116	131	149	95	84
Total	[2] 878	[2] 1,138	[2] 1,229	[2] 1,350	[2] 1,666	[2] 2,619	[2] 2,678	[2] 1,924	[2] 1,832

[1] Estimate. No records available to show the actual number in each State.
[2] Includes women agents. See table p. 15.

The large increase in agents shown by this table for the years 1917, 1918, and 1919 was due to appointment of emergency agents in connection with efforts to stimulate agricultural production to meet conditions created by the World War.

BOYS' CLUB WORK.

After the establishment of the county demonstration agent work as a fundamental part of the plan, the next step was the organization of boys' club work (Fig. 2). A few boys had been enlisted as demonstrators from the start. The first boys' club work, as a county unit, was organized in Holmes County, Miss., in 1907. During 1908 corn clubs were organized in a few counties in several States, with an enrollment of about 2,000. The experiment proved a success. In 1909 an assistant in club work was appointed in the Washington office and the same year several States appointed, in cooperation with the department, a State club agent. Systematic effort was made to organize the work in a few counties in every Southern State. The club work grew rapidly and attracted attention all over the country.

The enrollment in 1913 reached more than 91,000. During the first few years the club work was done largely through the schools, but the school officials did not always have the time or inclination to give proper supervision. It was found that many who had enrolled failed to do the work. In 1914 an effort was made to enlist only those who actually performed the work. This reduced the total number enrolled to 53,580, and in 1915 it increased to 62,842.

FIG. 2.—County agent instructing club boys in field selection of corn.

It was soon found that the best boys' club work was found in counties where the demonstration agent became interested and looked after both the boys' and men's demonstrations. Finally a policy was adopted making club work a part of the county agent's duties. Replies to a recent questionnaire from all States show that on the average all county agents devote about one-third of their time to club work. In many respects the club work is the most popular line of extension work. Since its beginning, thousands of the club boys

have grown into men who are making the best of demonstrators. Through it hundreds became interested in getting a better education. In recent years the most coveted prizes for club members have been scholarships in agricultural schools and colleges. It is gratifying to note that some of the early club members have graduated from agricultural colleges and since become efficient county agents. Several thousand boys in the corn clubs have produced more than 100 bushels of corn per acre, and 27 produced more than 200 bushels per acre. In later years, other crop clubs and animal clubs have been organized (Fig. 3) and the membership in these has grown rapidly; but the corn club still maintains the lead, so far as general distribution and numbers participating are concerned. The work has also

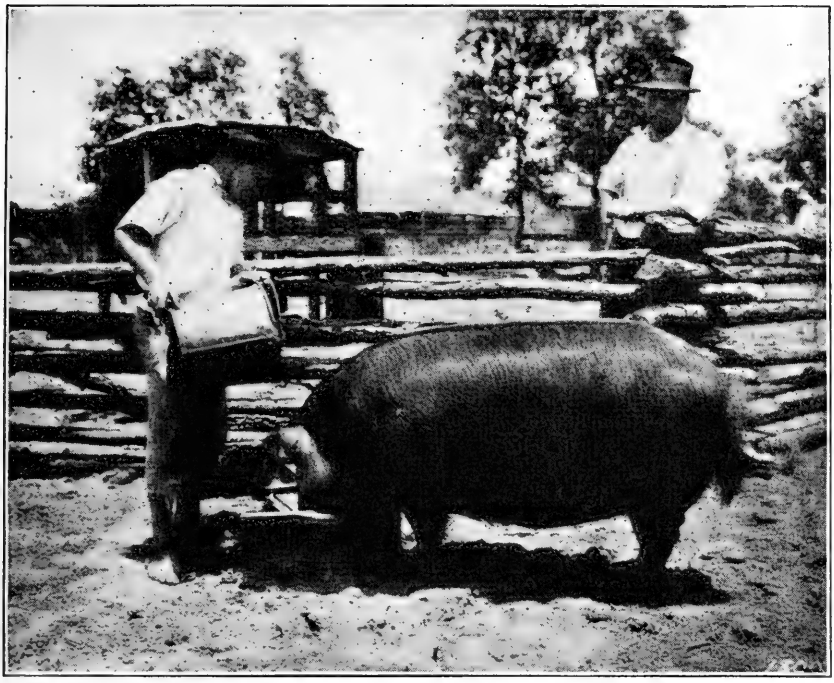

FIG. 3.—A pig club boy and his pig.

grown from the 1-year and 1-acre idea until some of the older boys are carrying on from 3 to 4 acre demonstrations, so that they may put into practice the idea of rotation and general farming.

To meet a need and to supply help to a large percentage of the population in the South, farm makers' clubs have been inaugurated for negro boys. These boys receive the same general instruction and perform their work under the same rules as those in the white boys' clubs.

GIRLS' CLUB AND HOME DEMONSTRATION WORK.

It was soon realized that to make the system of demonstration work complete women and girls must be included, so in 1910

girls' clubs were started in one county in South Carolina and two counties in Virginia. In 1911 there were 21 agents and more than 3,000 girls enrolled. This work grew very rapidly, until in 1915 there were in the 15 Southern States 387 home demonstration agents, with a club enrollment of 45,581. The girls, like beginners in every line of the work, were started off the first year with one crop (Fig. 4). The tomato was the first crop chosen and, as experience increased, other crops were added (Fig. 5). The girls were also taught how to can and preserve the products of their gardens.

As already indicated, the home demonstration agents' work was confined almost entirely to working with the girls for the first few

FIG. 4.—Home demonstration agent instructing club girls in tomato growing.

years; but, after this work became well established in the county, there was a natural demand for work of the same nature for the women; and in recent years the work of the home demonstration agents has been pretty evenly divided between that for girls and that for women. Since development in this line has been a process of evolution, as in the county agent work, after the garden and canning phases were pretty well established, poultry work and similar lines were taken up one after another until the home demonstration work has gradually developed into a system that covers almost every activity that naturally falls to the girl and the woman in the farm home.

When demonstration work was first started, the plan contemplated including all members of the family, but it was believed by the leaders at that time that it was not a wise policy to try to develop more than one phase of extension work at a time, the idea being to get one line well established and then gradually add the others as the occasion demanded and the finances would allow. One of the chief difficulties in pushing the girls' and women's work was that of finances. Under the provisions of the earlier law giving money for demonstration work, it could not legitimately be spent for carrying on either home demonstration or club work. To overcome this the

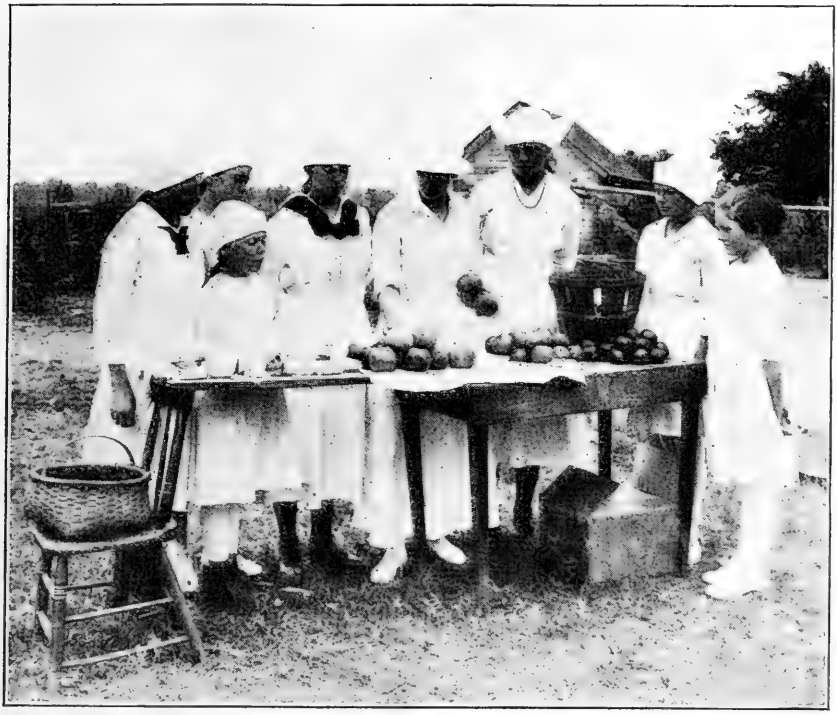

FIG. 5.—Instructing club members in sorting and grading fruits and vegetables.

General Education Board agreed to finance these two lines of work until they had become sufficiently established to justify the Government in taking part in financing them. The fact that the work accomplished under these new lines was so satisfactory and received so much publicity no doubt had a great influence in inducing those who had a part in drafting the extension legislation to include definite provision for home economics or home demonstration work in the Smith Lever Act. Since the passage of this act and its acceptance by the various States, the work along this line has become as well recognized a part of the system as the county agents' work.

Girls' club work was started on the theory that the first fundamental and essential need was to increase the family income. Greater

financial independence must be established before taking up, except in a very general way, plans for improvement of the home and premises. It has been the usual experience that as soon as prosperity begins the first impulse is to make improvements and increase the comforts in the home. The records show hundreds of instances where a club girl's first money was used to help furnish the home and improve the surroundings and buy suitable clothing. Many have actually gone through high school and college on money made in the club work.

FIG. 6.—Home team work in canning tomatoes.

As mentioned before, for several years the home demonstration agent confined her work almost entirely to girls, but the mother naturally was drawn in, and soon the agent was dividing her energies equally between the girls and their mothers. (Fig. 6.) When the work had become well enough advanced for the agent to get the sympathy and support of all members of the family, she had no difficulty in taking up almost every home problem and in suggesting helpful conveniences and improvements to lighten labor as well as brighten life.

The table following shows the growth of home demonstration by States from 1911 to 1921, inclusive.

Number of extension home demonstration agents engaged since the beginning of home demonstration work in 1911 to 1921, inclusive.

[Includes urban and emergency agents.]

State.	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Texas	0	16	19	26	27	39	34	91	112	71	55
Oklahoma	0	12	15	19	24	23	28	75	58	49	44
Louisiana	2	13	8	13	13	22	25	58	54	34	32
Arkansas	0	10	15	15	20	36	50	96	93	62	49
Mississippi	3	13	20	33	33	33	60	82	94	66	55
Alabama	4	13	12	18	19	29	30	84	54	53	48
Georgia	3	17	28	29	48	47	62	141	133	77	85
Florida	0	9	14	24	27	31	39	87	76	55	45
South Carolina	4	11	17	21	24	33	39	72	89	52	57
North Carolina	2	15	22	27	34	47	52	101	107	60	55
Virginia	3	13	15	17	22	25	44	111	107	43	35
Maryland	0	0	0	5	6	9	14	34	30	23	21
Tennessee	0	9	14	18	24	36	56	108	100	45	37
Kentucky	0	0	0	9	19	27	30	55	34	24	26
West Virginia	0	0	0	5	10	12	13	34	24	16	11
Total	21	151	199	279	350	449	576	1,229	1,165	730	655

ORGANIZATION AND ADMINISTRATION.

After the passage of the Smith-Lever Act, May 8, 1914, all demonstration or extension work of the United States Department of Agriculture and the State agricultural colleges became cooperative. When the assent of the governor was secured and the general memorandum of understanding between the State college and the United States Department of Agriculture was signed, each State established an extension division in its agricultural college as an independent section ranking with the experiment station or college teaching force. A director, mutually satisfactory to the college and the department, is in charge of all extension work in the State. The director selects his staff, outlines his plans of work, which are covered by definite projects, previously agreed upon, and duly signed by himself and the representatives of the department. The administrative and supervisory force in each State consists of the director in charge of all the work; the assistant director or State agents for each leading line of work, who cover the entire State; men and women district agents, who have charge of the lines of work in a group of counties; and the county men and women agents, whose work is confined to the county.

As it is a part of every man agent's duty to look after boys' club work and of every home demonstration agent's to look after girls' club work in the county, the only club agents are those connected with the State office, who are in reality club specialists to assist the county agents in their club work, prepare literature and instructions for club members, collect the data on results, and prepare the State annual report.

In addition, there is a considerable force of negro agents, men and women, who work exclusively with the negro farmers and farm women in those sections where there is a demand for such an additional force and where it is thought advisable to have such agents.[1]

[1] For details of the negro extension work, see U. S. Department of Agriculture Circular 190.

To supplement this force located in the counties is a group of subject-matter specialists, who find out the best up-to-date information in their particular lines and furnish it to the agents, and, where necessary, assist the agents in carrying the information to the farmers and getting it adopted in field practice.

In all lines of extension work, the concrete, definite demonstration on the farm or in the home is fundamental. The primary object is, first to establish county agent work in a county, then home demonstration or any other additional work that seems proper and can be financed. The ultimate aim, of course, is to have at least a man and a woman in every agricultural county.

The county agent has been recognized as the leader of all agricultural extension work in the county. The scope of his activities has been extended to include all kinds of farm problems. The standard of qualifications and personality of the agents has steadily improved.

Every extension worker is now required to submit in advance an outline of the plan of work for the year.

The county agent's work in the South is invariably supported from public funds from three sources: County, State, and the United States Department of Agriculture. Agents are required, as public officials, to be ready to render a reasonable service to all the people in the county upon request.

Community, county, and State organizations have come into being in nearly all of the States for the benefit of the farming interests. The extension forces cooperate and encourage them in every legitimate way and in turn receive, in most cases, very material assistance in carrying out their programs of work. These organizations have been most helpful in special campaigns, like safe farming, tick eradication, hog-cholera control, increasing the live stock, better marketing of farm products, and the like. These special campaigns have nearly always been made in cooperation with other bureaus of the United States Department of Agriculture.

It is hoped that the foregoing sketch of the early history and development of the demonstration work will be helpful to a better understanding of the fundamental principles on which it was founded, the object and aims it hoped to accomplish, and the remarkable growth it has made up to the present time. The constantly increasing amount of funds contributed through the Federal Government, by the State legislatures, and from county sources would appear to be sufficient evidence to show that the work has been appreciated by those receiving the service as well as by those responsible for the expenditure of the public funds. There are whole communities and counties in every State where the entire system of farming has been changed in the last 10 or 15 years through the influence of the extension work. With its aid many sections that were once considered poor and unprogressive have developed a sound and profitable agriculture.

EXTENSION WORK IN THE SOUTHERN STATES, 1921.

The sensational drop in the prices of all farm products in the fall of 1920 and the general business depression resulting caused the extension forces in the Southern States to begin the work in 1921

under more trying conditions than they had yet experienced. The necessary readjustments of the farming program after the war were made most difficult on account of high-priced cotton. The tendency of the farmer was to return to the one-crop system, which had long been the drawback in this section. The 1920 crop was the most expensive ever produced in the South. The labor, farm machinery, fertilizers, and other things necessary to grow a crop were purchased at peak prices. By harvest time all commodities were selling for less than the cost of production. All business became demoralized. Farm credit was destroyed, and thousands of farmers who had been in good circumstances had to give up land, equipment, and personal property to satisfy their creditors. The period of prosperity and spending was followed by a great wave of economy, which naturally affected the financial support of the extension service. The hard times and a demand for decrease in taxes caused some county fiscal bodies to withdraw their support of the extension agents, although the actual decrease in the total number of workers in the whole territory was not as great as might have been expected.

Notwithstanding this unfavorable outlook, the extension leaders in every State immediately began to make their plans to meet the unusual situation. Before the planting season was begun, the most successful campaign for reduction in cotton acreage in the history of the country had been conducted and a well-balanced diversified crop program adopted. Practically all of the land released by this reduction of the cotton acreage was devoted to food and feed crops, which placed many farmers for the first time on a self-supporting basis.

During the war period and the first two years following, many new agents and some of the old agents got away from the recognized fundamentals essential to a sound program for extension work. An impression had gotten abroad that field demonstrations were no longer necessary. It was assumed that, because the agents, under emergency conditions, had succeeded in doing some necessary work by propaganda, campaigning, and much talk, this method could be continued under normal conditions. The State officials realized that there had been a falling off in the agents' influence in improving farm conditions as compared with previous years. This in a measure was due to the farmers' unusual prosperity as a result of high prices for all his products, especially cotton, during the war. Many drifted back to the one-crop system instead of continuing the safe and sane program that had been fairly well established in many sections.

The situation they faced at the beginning of 1921 changed the farmers' attitude toward the agents. Everybody was seeking advice and suggestions as to the best way of meeting the situation. The majority of the supervising force seized the opportunity to impress the agents with the importance of readjusting the plans of work on a sound basis. Examination of the records showed that the agent who could still influence farmers to follow methods that were safe and sound had no trouble in securing financial support. On the other hand, the agent who did not make personal contacts but carried on his work from the office and by letter writing and propaganda failed.

COUNTY AGENT WORK.

As in earlier years, most of the demonstrations in 1921 were confined to the standard farm crops and some phase of live-stock work. Demonstrations with hay, forage crops, orchards, permanent pastures, and soil improvement are again receiving a great deal of attention. The community and club demonstration idea has become well recognized and greatly developed in each State.

No county agent now attempts to carry on his work without some kind of a plan. In most cases the county program is worked out in a preliminary meeting of the man and woman agent with a committee composed of representatives from all organized communities in the county. They discuss the problems and how they can best be solved, and outline a tentative plan for the county. This is sent by the agents through the district agent to the State office, where the supervisory force and the specialists make revisions and suggestions before it is approved and returned to the agents in the county. Most of the States have developed a State program of work. Practically all of the county plans for 1921 provided for stressing a few of the outstanding needs or activities. The features that seem to be common to all the States are: Soil-improvement demonstrations; field-crop demonstrations, including orchard and horticulture; live-stock demonstrations; club work; community organization; and cooperative marketing.

SOIL IMPROVEMENT.

It is beginning to dawn upon all extension workers that more attention must be given to soil improvement if southern agriculture is to be maintained at its highest efficiency. The extension service in every State is making unusual efforts to encourage, first, terracing the land to prevent washing, and, second, the growing of more soil improving crops to be turned under. It is a common thing to see whole farms terraced in all of the cotton States, and in some counties a large percentage of the farms has been terraced. The county agents reported 22,335 newly terraced farms last year.

Use of manures and fertilizers.—Greater attention probably was given to the saving and application of farm manures and lime than in any previous year. More than 61,000 farmers were instructed in the care and use of manure, and 13,351 in the use of lime. The inability of the farmers to buy the usual amount of commercial fertilizers accounts for the increased interest in home manures. Owing to the financial condition of the farmers and the merchants, and high prices asked, less than half as much fertilizer was bought in 1921 as in 1920. Last year's experience without fertilizer on many farms demonstrated the fact that a fairly liberal use of commercial fertilizer is almost a necessity to produce cotton under boll-weevil conditions. There is little question that the unusual damage from the weevil and low average yields in 1921 were largely due to insufficient use of fertilizer to promote growth and hasten maturity.

CROP DEMONSTRATIONS.

As in all previous years, corn led in field crop demonstrations. There were 8,981 corn demonstrations, totaling 211,340 acres, aver-

aging 38.4 bushels per acre, which is almost double the average yield in the Southern States. In addition, 53,302 farmers cooperated with the county agent in testing one or more of the practices being demonstrated, on 653,476 acres, with an average yield of 28.7 bushels. As a result of these demonstrations and other extension influences 275,000 farmers changed their methods of corn culture.

Cotton came next, with 4,245 demonstrations, embracing 115,591 acres, yielding an average of 862 pounds of seed cotton per acre, or more than twice the average yield of the entire cotton territory. In addition, 34,713 farmers cooperated with agents in adopting one or more of the demonstrated practices in connection with cotton production on 437,723 acres, obtaining an average yield of 574 pounds. As a result of the extension work, 144,000 farmers changed their methods of cotton culture.

There were 8,777 demonstrations on 165,175 acres, with the small grains—oats, wheat, rye, barley, and rice. In addition, 34,305 farmers cooperated with the extension agents in testing one or more of the demonstrated practices in small grain culture on 314,362 acres. As a result of the extension work, 145,000 farmers changed their methods of small grain culture. The average yields obtained in the small grains demonstrations exceeded the average yield in the grain-producing States, showing that such crops may be grown successfully almost anywhere in the cotton region.

More than the usual attention was given to the winter legumes, including alfalfa and red, crimson, bur, and sweet clovers, all of which were found to do well in many sections. There were 4,294 demonstrations in connection with winter legumes on 51,898 acres. In addition, 7,240 farmers cooperated with the agents in testing improved methods of culture of winter legumes on 61,300 acres. As a result of the extension work 44,000 farmers changed their practices in connection with winter legumes. The summer legumes, including cowpeas, soy beans, velvet beans, lespedeza, and peanuts for feed, were generally grown. The agents report 12,247 demonstrations, with approximately 212,123 acres, in these crops. In addition, 42,156 farmers cooperated with the agents in testing one or more of the recommended practices in connection with the production of summer legumes on 306,680 acres. The extension work resulted in 160,000 farmers changing their methods of culture of summer legumes.

A greatly increased acreage was planted in various hay and forage crops for feed, and the number of new and renovated pastures was beyond all expectations. Many minor crops, such as potatoes, sugar cane, sorghum, and orchard and truck crops, were materially increased both for home use and for market purposes. The total of all crop demonstrations, including pastures, in the Southern States, was 292,790, the total acreage covered being 3,011,633.

Good seed.—The progressive farmer now feels that it is just as important and profitable to have purebred seed as purebred animals. Another outstanding piece of demonstration work was the increasing number of communities where all the farmers have been influenced to standardize and grow the same variety of corn or cotton. This has probably gone further in parts of Texas, Alabama, Arkansas, and North Carolina than in any of the other States.

Horticultural work received a severe setback over a large part of the territory on account of the late freezes that practically destroyed the fruit crops and some early vegetables. As a result many orchards have been more or less neglected. However, small fruits, truck crops, melons, and sweet potatoes received attention and were on the whole found profitable. There were probably more home gardens and small orchards planned and started than during previous years. The extension specialist in horticulture has been in demand in many States and has rendered a most valuable service, not only in connection with producing the crops but in grading, packing, and marketing the products.

Live-stock Work.

Owing to the prevailing low prices for all kinds of live stock, this industry received quite a setback throughout the cotton territory and naturally made little real progress even in those Southern States not strictly in the cotton territory. Dairying, because of the good demand and satisfactory prices for its products, was the only branch of live-stock farming that held its own; and in some localities made material progress. In certain sections of Arkansas, Alabama, Georgia, Louisiana, Mississippi, and South Carolina a healthy interest in dairying has been developed; and in the other States, where there was already considerable dairying, greater attention is being given to improvements and expansion. An unusual effort was made to place more milk cows on the small farms to provide milk and butter for family use. Considerable work has been done in a number of States to increase consumption of milk. The feeding and pasture phases were emphasized by all agencies. Besides the general promotion of the dairy work, the agents and specialists report as a result of their influence the bringing into the States of 2,080 purebred bulls, 7,595 cows, and 10,177 grade dairy cows. They assisted in testing for production 25,631 cows; report 2,757 demonstrations along various lines; established 404 new cream stations and 321 new cream routes, 162 cow-testing associations, and 103 bull associations.

Beef cattle.—The beef-cattle industry suffered a most serious setback. The prices of all grades of beef animals became so low that many became discouraged, sold their herds, and went out of the business. Many farseeing agricultural leaders in the South believe there is danger that this line of live-stock farming may be overencouraged, except in very restricted areas. It is safe to advocate the growing of a few well-bred beef animals on every farm; and on certain farms, where there are large areas well adapted to pastures, considerable herds might be profitably kept, if proper intelligence and attention is put into the business. In recent years much has been done to build up small herds as side lines on the average farm. A really worth while piece of extension work has been accomplished by pushing the better-sire campaigns. The results are plainly visible throughout the cotton States in the improved grade of cattle. During the year the extension agencies assisted in placing, mostly on small farms, 4,576 purebred and 9,507 graded beef cattle in the various communities, showing that the idea of improving the type of a limited number of cattle is more important than having too many.

Swine.—The swine industry has about held its own. Even with the low prices prevailing, many farmers made some profit on their hogs. With the grade of swine now produced in the southern territory, permanent success should follow a reasonable amount of attention to the growing of feed and the providing of suitable conditions. In certain sections the farmers have found it more profitable to grow 100 to 125 pound pigs to be sold as feeders. This may be the result of claims that the South produces only soft pork. There is no reason, however, for continuing this practice, as the hogs can be grown, up to a certain stage, on pasture and peanuts and then topped off with corn and other feeds to harden the flesh. The agents and specialists report influencing the starting of 8,919 farmers with purebred breeding stock and the bringing into the territory of 21,116 purebred swine for improving and building up the herds already started.

Poultry.—The poultry industry has developed rapidly in all the States. Where properly managed, either on a small or a rather large scale, it has given satisfactory returns. There is a poultry extension specialist in every State, working largely with the home demonstration agents and club members and also assisting the county agents and farmers whenever necessary. In one State more than a thousand purebred flocks were placed on farms in 1921. Special drives to increase production of infertile eggs and to improve grading, packing, and marketing of eggs, and campaigns to promote culling and to create interest in better feeding and housing have been conducted in all the States. More details regarding poultry work may be found in the home demonstration section of this report (p. 27).

Organizations.

A large part of the agents' attention in every State during the year was devoted to instructing the farmers on matters relating to the formation and conduct of farm organizations. No agent can now hope to reach a sufficient number of the people in the county without the aid of some organized cooperating body. Farm bureaus, the farmers' union, live-stock associations, truck-growing associations, tobacco-growers' associations, and others are giving more or less support to the extension divisions, and, in some cases, are definitely lined up with them in all kinds of work that the extension people can legitimately participate in. There were reported as actively supporting the extension work in the Southern States in 1921, 585 county organizations, composed of 7,583 community or farmers' club organizations. Of this number, 4,828 are organized on such a plan as to include the whole family. The total membership was about 295,000.

Cooperative Marketing.

For several years the problem of marketing farm products has been of primary importance (Fig. 7). The conditions in which the agricultural situation found itself during the last two years have made it absolutely necessary for the whole extension force to devote a great deal of attention to this big problem. The agents have been more or less active in aiding the organization of cooperative shipment of farm products on a county basis for several years past; but

during 1921 there was a demand in every State for state-wide organizations to handle this problem. Usually these have been brought about first by community cooperative marketing associations, these merging into county organizations and then into a State organization. During 1921 the marketing idea was advanced still further by the organization of marketing associations on a commodity basis. Remarkable progress has been made in perfecting cooperative cotton marketing associations in Oklahoma, Texas, and Mississippi, which handled a good percentage of the 1921 cotton crop with satisfaction and profit to the farmers. The other heavy cotton producing States have about perfected such associations for handling the 1922 crop. North Carolina, Virginia, South Carolina, Kentucky, and Tennessee have organized tobacco associations, through which a large part of the tobacco crop was marketed. No doubt by the next harvest season there will be in many of the States, in addition to cooperative cotton marketing associations, a pretty well developed cooperative

FIG. 7.—Cooperative marketing.

marketing system on the commodity basis for handling such locally grown crops as peanuts, sweet potatoes, hay, and the various kinds of fruit and truck crops. The membership in the cooperative marketing associations being organized on the commodity basis, especially in the case of the major products, are signing contracts of from five to seven years' duration. This insures a degree of permanency and enables the management to proceed in a business-like manner. The extension forces are not officially connected with these associations, but have been active in encouraging and promoting them. Local cooperative buying and selling organizations so assisted handled more than $37,000,000 worth of products, with a saving of over $6,000,000.

Closely associated with marketing work should be mentioned the sweet-potato industry, which has made wonderful growth through the building of curing and storage houses in many sections of the cotton region. The extension forces, cooperating with the Bureau of Plant Industry and the Bureau of Markets and Crop Estimates

(now Agricultural Economics), have assisted farmers and others in building hundreds of these houses. The results have been highly satisfactory, being the means of adding another cash crop as partial substitute for cotton in the boll-weevil districts.

Fairs.

The extension workers have always spent more or less time and thought on fairs of various sorts. No doubt the community and county fairs have been a stimulus to agricultural improvement in many cases. Not until recently has the idea of making fairs educational rather than simply a mass display of miscellaneous farm and home products been given much consideration. The tendency now is to replace such still exhibits with those having some movement or life in them. For example, the great displays of cheese, butter, and other dairy products, with the still dairy equipment usually found in dairy exhibits at fairs, are being replaced by demonstrations in the methods of producing and handling the different products, conducted by well-qualified persons. This not only attracts attention, but also gives valuable instruction to visitors. The same method could be applied to many other exhibits. When the idea has been fully developed and applied, it is believed that much more interest will be taken in fairs and they will be truly a part of a great educational movement.

Miscellaneous Work.

Some other extension activities during the year were as follows: Agents' visits to farms, 941,479; miles traveled, 6,555,320; office calls, 1,742,633; public meetings held, 70,123, attendance, 4,136,879; field meetings, 20,031, attendance, 392,041; United States Department of Agriculture bulletins distributed, 545,282; State publications distributed, 495,643; new farm buildings erected, 7,481, improved, 14,643; plans furnished, 5,060; water systems installed 2,756; lighting plants installed, 4,289; homes screened, 59,408; sanitary improvements made, 37,877; telephone systems installed, 1,474; pastures started or renovated, 16,526; drainage put in, 224,180 acres; new farm implements and tools procured, 244,330.

HOME DEMONSTRATION AND GIRLS' CLUB WORK.

The most significant development in the home demonstration work in the South in 1921 was the great increase in the number of demonstrations carried on by the women and girls in their homes and on the farmsteads. The total enrollment in various kinds of home demonstration work in 1921 was 517,046, as compared with 321,129 in 1920. While this is a splendid growth, it is the rather natural development. A woman or girl who succeeds with a demonstration in one line naturally desires to expand to other lines. She takes pleasure in the fact that her good work attracts the attention of her neighbors. She not only becomes an example but also an instructor. Expansion of demonstrations from the garden to the orchard and vineyard is a growth not only logical but automatic. The agent finds little trouble in leading from productive activities into utiliza-

tion of products; hence, such encouraging figures in the reports of canning, drying, brining, and even marketing.

The increasing numbers of women and girls sending in reports of their work further proves the substantial character of the home demonstration work. Complete reports were received from 308,301 out of a half million enrolled in various lines of the home demonstration work, showing that the work is taken more seriously and carried forward more vigorously each year. Attention is called to the fact that demonstrators with two or more years' experience are disposed to take up work along several lines. Each individual enrolled averaged about two activities. Of the 264,012 individual girls and women enrolled, 127,602 turned in their reports. Nearly two-thirds of the enrollment were in organized clubs. Altogether there were 23,076 organized clubs, with a total membership of 160,823, leaving practically 100,000 demonstrators who carried out the work outside of organized clubs.

It is a notable fact that a home demonstration agent can have a large number of people doing work. It is not so much the instruction work that the agent herself does as it is the number of examples or object lessons she can get the girls and women to do with their own hands and in their own homes. Of course, the agents have to carry forward some instruction work at all times. The total number of demonstrations in methods by the home demonstration agents in 1921 was 114,199. It is unfortunate, however, when an agent considers her instruction work as the real teaching objective. It is entirely possible for an agent to put on a good lecture demonstration which will be followed by meager results. It is a different proposition when she inspires some one else to take up activities on her own account which will lead on step by step into permanent home improvement and beautification. It is such work on the part of earnest women and girls that is furnishing object lessons which constitute perennial and perpetual instruction and inspiration.

There were 947 demonstrations per agent in the Southern States in 1921 and an average of 564 reports. There were 484 demonstrators per agent. This certainly means that one woman can multiply her usefulness to a wonderful degree in extension work. Her efficiency is measured by her ability to get other people to do things. It can readily be seen that where an agent has been in a county for several years and where she has a large number of dependable cooperators, she does not have to give so much individual attention to the work. In fact, each woman who is making improvements in her home and its environment is a center of instruction and influence.

It is necessary for county extension workers to carry forward a strong program of demonstrations at all times. A certain amount of coaching and training is necessary, but the instruction work on the part of the agent herself is subordinated to her program of demonstrations. She must push others forward because they convince by their deeds. There are many instances where agents who have worked quietly in their counties have developed an organization which has grown out of the successes of the women and girls. In many cases their work will go on for years, whether the agent remains in a county or not. It is possible, even in pioneer work of

this kind, to set up definite standards of measurement for successful work among masses of people.

Gardening.—The girls' club work began in 1910 with garden work. The earlier demonstrations were in the production and utilization of one vegetable—the tomato. It soon developed into home demonstration work for women as well as for girls, but the interest in the garden work has never subsided. It is still the starting point for the first-year club members and demonstrators. There are increasing numbers of advanced demonstrations in various phases of garden work every year. In 1921 there was a total enrollment of 31,873 girls and 59,026 women in home, market, combination, winter, and perennial garden work. Together they produced a total yield of more than 30,000,000 pounds. More than one-third of this yield was canned and one-fifth sold fresh, the remainder being used in the homes.

Flowers.—One of the most interesting developments of the year was the number of flower garden demonstrations undertaken. This is the first year that such demonstrations have been systematically and generally encouraged. They represent an advanced step of development. There were 23,233 demonstrations of this kind enrolled. While these demonstrations were encouraged primarily for their beauty, many of the agents were surprised to find that the girls and women could market flowers to fine advantage in many towns and cities. Many instances were reported where individual demonstrators cleared several hundred dollars each on their flowers.

Fruits.—It is but a short step from the garden demonstrations to demonstrations with orchards, groves, and vineyards. Inasmuch as successful work along these lines requires continuous application for several years, these demonstrations are more difficult, but also more important and effective. As a rule, the object lessons which can be given in a short time do not make a permanent and lasting impression like those which require a longer period. From one point of view a home demonstration is really not complete until all of the phases of work which have been developed in the last 10 or 12 years are completed upon a given farmstead. When a woman or girl gets such an objective she becomes a great influence and power in her community. The demonstration is not complete until the whole farmstead, with a well-built house and a beautiful lawn and landscape, is developed. Real progress in this direction is indicated, however, when the agents report an enrollment of 12,997 girls and 43,807 women in orchard, grove, and vineyard demonstrations. This represents work with apples, peaches, citrus trees, nuts, grapes, berries, and small fruit.

Canning and preserving.—In view of the fact that frost came late in the spring of 1921, and the damage to fruit as well as vegetables was extensive, it was not to be expected that the girls and women would do so much canning and conserving. In fact there was some reduction in these lines of work. The figures for them are still large, however. Four million six hundred thousand quarts of vegetables and an equal number of quarts of fruit were canned. In addition, 3,129,965 quarts of preserves, jams, jellies, fruit juices, ketchups, pickles, relishes, and soup mixtures were put up for winter

use or for market and more than 5,000,000 pounds were dried, brined, and stored under the instruction of the agents.

The increase in meat conservation work (Fig. 8) in 1921 more than offset the slight loss in the work with fruits and vegetables. In fact, the figures indicate the accomplishment of more difficult work by the agents as well as by the women and girls. The number of pounds of beef, veal, pork, lamb, poultry, game, fish, and sea foods put up was 625,083. This was plain canning. It indicates, to some extent, the use of steam-pressure outfits for all meat work. In addition to the plain canning of meat, much interest has been aroused in the canning of certain noted old-time Southern dishes, such as Dixie burgoo, pinebark fish stew, chicken gumbo, and jambolaya. These combinations of the various meats and vegetables rep-

FIG. 8.—Preparing beef for canning.

resent very important dietary work. The club members take the greatest interest in the study of foods when they are making combinations of this kind. In fact, it has been found very desirable in all stages of the demonstration work to impress certain important lessons incidentally. Sanitation, nutrition, balanced diet, and many other things can be impressed so much more effectively when the motive is established first. It is much easier to create a desire for knowledge on the part of people who are really anxious to do things for themselves and for their neighbors. The profit motive is fundamental.

The home demonstration agents have been stressing the meat curing demonstrations only a few years, but the figures for the past year are excellent. The total number of pounds of beef, pork, sausage, lard, scrapple, etc., cured during 1921 was 15,945,608.

Poultry.—The poultry work has been another outstanding feature during 1921. (Fig. 9.) More than 60,000 were enrolled in the extension work with chickens, turkeys, ducks, guineas, and geese. There seems to be the same tendency toward evolution in the poultry work that was manifest in the garden. When the club member succeeds with a few chickens she wants to go on to advanced stages of poultry work. It is not long until she is demonstrating the use of incubators, brooders, and laying houses, and the handling of standard bred chickens in general. Several club members report profits of above $1,000 per member in their poultry work. This seems to indicate that the poultry work up to this time has largely been one of preparation for greater things.

FIG. 9.—A cooperative egg circle.

Milk and milk products.—The interest in the demonstrations with milk and milk products was maintained throughout the year. About 35,000 demonstrators took part in this important line. Three and one-half million pounds of butter were made in accordance with the instructions given by the agents. A great deal of cheese was made and thousands of gallons of milk and cream were used at home and put on the market as a result of the activities of the women agents. Milk was secured in 3,211 country schools for lunches. This was done by the home demonstration clubs.

Bread.—Cereal products furnished the material for the enrollment of 45265 in bread demonstrations. In addition to work with plain bread, a great deal was done with gems, cakes, waffles, pies, cookies,

etc. In many communities there has been a complete revolution in the methods of bread making.

Clothing, etc.—From 75,000 to 100,000 demonstrators have done special work with textile material, fabrics, straws, pine needles, etc. Thus there are records of thousands of caps, aprons, emblems, sewing bags, towels, holders, dresses, hats, dress forms, table sets, curtains, rugs, baskets, brushes, brooms, quilts, coverlets, bedspreads, and mattresses made. As in other phases of work, this also represents a gradual development with certain articles and products added year by year.

Equipment and conveniences.—One of the most interesting and significant features of the whole work has been the equipment made or purchased in order to promote the demonstrations in hand.

FIG. 10.—Home demonstration agent at a community club meeting.

(Fig. 10.) The records for 1921 show that about 28,000 women and girls secured spraying outfits and made cold frames and hotbeds for their garden outfits. About 60,000 made or purchased canning outfits, driers, and other similar equipment for their fruit and vegetable work. More than 30,000 have provided self-feeders, water fountains, and candling lamps for their poultry work. About 7,000 secured special equipment for meat work, such as steam-pressure cookers, sausage mills, scales, and cutting outfits. More than 30,000 bought separators, sanitary milking pails, thermometers, improved churns, and other facilities for handling milk and milk products in the cleanest and best manner. The bread work is emphasized when it is realized that 40,000 demonstrators secured bread mixers, measuring cups, oven thermometers, bread boxes, and other articles used in making good bread.

It would not be possible to promote work of this kind through a series of years without getting some excellent results in general household equipment. More than 20,000 homes reported fireless cookers, kitchen cabinets, sinks, draining boards, wheel trays, ironing boards, and other similar things which make for more comfort and better living.

Influence of the work.—There are many miscellaneous features connected with the work of the women and girls which in themselves constitute sufficient material for a very illuminating and encouraging report. It is no small achievement for 466 girls to be able to attend high schools and colleges on the scholarships won in their club work. It is equally interesting to read about the 2,042 who are paying part or all of their school and college expenses from money earned in the club work. Likewise, there is encouragement in the fact that 5,644 girls became bank depositors for the first time.

Good work by individuals in their homes is sure to lead to the best kind of group or community work. While the agents have directed their efforts primarily to the homes, it is gratifying to find that the people who achieved good results in their own standardized activities united in erecting 2,268 community buildings to be used for demonstration club purposes. Local home demonstration clubs have cooperated with teachers in providing hot lunches at 1,154 schools. These are more than ordinary school lunches. They are real home lunches at schools, which is the proper basis upon which such work must be done. The home demonstration clubs of mothers, not the agents, should assume the responsibility.

Club markets.—There is no more significant development in connection with any phase of extension work than that which has been done by the women and girls in establishing club markets. Home demonstration agents have taken advantage of the period of depression to show the real value of their work. They are appreciated in periods of hard times even more than in prosperity.

In 1921, 266 club markets were conducted in the South. Markets of this kind are opened, as a rule, for two or three hours a day, twice a week. In some cities, special buildings have been erected for such purpose. In others, boards of trade and business men have provided large storerooms for the markets. Sometimes rest rooms are furnished adjacent to such markets. The women and girls bring in the selected and graded products from their homes and farms. Such things as butter, eggs, fruits, vegetables, and meats are carefully prepared and standardized under the instruction of the agents and specialists. Frequently one woman brings in the products for six or eight of her neighbors. In this way they take turns in doing the marketing and there is no hardship on anyone. In fact, the trip to market is a diversion and a pleasure. A committee of city and country women fixes fair prices for each market day. A club girl, with her desk and chair in the center of the market, receives reports of the sales and keeps a record of them. She also collects a small commission to pay for wrapping paper, bags, scales, and other incidental expenses. The commission covers actual and necessary costs only. The merchants and business men do not object to such markets, because when these women get more money for their produce they buy more things at the stores and have more money to put into the banks.

Value of products.—A striking feature of the home demonstration work in 1921 is the value of the products sold and used at home. It is a wonderful achievement and reflects great credit on the 546 county home demonstration agents who had such a large share in bringing it about. Of course the supervising agents and specialists did their share. The total value of $18,409,089 of products sold and used at home indicates to some degree the far-reaching power and success of the work. The following table brings out these and other interesting points:

Value of products of girls' and women's club work.

Name of article from which income is derived.	Girls' work (value of products).		Women's work (value of products).	
	Sold.	Used at home.	Sold.	Used at home.
Vegetables and fruits (fresh, canned, and conserved)	$209,779.63	$1,743,559.25	$1,404,811.85	$3,524,847.90
Flowers	3,825.33		13,728.54	
Poultry products	123,925.36	125,972.29	1,784,736.46	1,487,242.78
Miscellaneous (squabs, rabbits, fish from fish ponds, honey)	3,249.58	3,347.40	24,847.02	20,322.00
Meat work (canned and cured meats, combination and by-products)	710.80	84,701.59	408,837.85	2,143,819.79
Milk products:				
Butter and cheese	17,227.70	45,679.11	689,019.55	926,757.24
Cream and milk	20,700.96	(1)	1,424,464.85	(1)
Cereal products (bread)	(1)	147,306.78	(1)	414,785.69
Textile material (straws, rushes, splits, pine needles and saving by remodeling and dyeing.	32,895.30	172,302.00	102,127.93	245,118.20
Total	412,314.66	2,322,868.42	5,852,574.05	8,762,893.60
Total value	2,735,183.08		14,615,467.65	
Total value of all work	17,350,650.73			
Total prizes and scholarships awarded	92,208.18			
Grand total	17,442,858.91			

[1] Not reported.

Home beautification.—When the home demonstration work was first inaugurated, it was planned to have demonstrations in beautiful homes and landscapes as the crowning feature. It was necessary to start with a few primary things and work up gradually to such a climax. The work had been going on 8 or 10 years before many demonstrations of such nature were undertaken. There are now so many club members and demonstrators in the advanced steps of the work, however, that these beautification plans and activities are increasing rapidly. New club members begin with the same fundamental features and work up to the same final results. Nearly 20,000 women and girls carried on definite demonstrations in house and lawn improvement during 1921. Some of them undertook two or three different demonstrations along these lines.

There were 6,725 homes remodeled and repaired in accordance with the plans agreed upon by the agents and demonstrators. In spite of the hard times, 1,112 new homes were built under similar arrangements. A very fine feature of the construction work is indicated by the fact that 12,109 rooms and porches were remodeled or refurnished. The demonstrations represent improvement of girls' bedrooms, family living rooms, and sleeping porches. In 22,459

homes screens were put in, either for the whole house or for the kitchen and dining room. Nearly 5,000 demonstrations were reported in the installation of lighting, water, heating, and sewage systems. Doubtless these features of the work will be greatly enlarged during the next few years as the people again become more prosperous. Many of the improvements for the past year can be accounted for solely because the girls and women made money out of their own enterprises and were able to have improvements made in the homes without calling upon the husbands and fathers for all the money for such enterprises. It is much better for the women and girls to have their own bank accounts and to be able to share equally in such home improvements.

Lawn improvement is becoming more and more general. The people seem to turn to the work of beautification as a solace in periods of distress and depression. Some of the demonstrations show that plans for the improvement of the whole farmstead have been worked out, the grass has been seeded, shrubs, trees, and flowers planted. In other cases the demonstrations consist in doing some of these things only. Other steps will be taken from time to time until the whole farmstead with the house as a center becomes a demonstration. It is worthy of permanent record, however, that there were 63,935 lawn and landscape demonstrations during the past year. The women agents have established the home demonstration work in the Southern States in all its fundamental lines in a period of little more than 10 years. Another decade of achievement similarly faithful and efficient will intensify and multiply this great agency of progress and service.

BOYS' CLUB WORK.

The club work in 1921 was naturally affected by the influences and conditions that all lines of extension work had to meet. The financial depression which prevailed in practically every agricultural section reduced the number of agents. The low prices of all the club boys' products discouraged many of them from taking up new work, and in some cases they dropped the work already started. To pursue any line of endeavor very enthusiastically there must be a reasonable hope of financial reward. This is especially true with boys. Fortunately the club leaders had developed higher ideals and ambitions in the minds and hearts of the members than that of money alone. While the boys were taught that good business required that a profit sould be made in producing their crops, yet the most important thing to get was training, knowledge, healthful exercise, and the satisfaction in knowing that they had accomplished something worth while by their own efforts. The value of the opportunity for social contact with other boys and girls in the recreational features of the local clubs, short courses, camps, etc., can hardly be overestimated. It is very gratifying to the club leaders to see, as the years go by, the increasing number of boys who, through their club work, get an inspiration to become more than the ordinary boy. Hundreds and perhaps thousands are now in high school and college who would never have thought of such a thing if they had not joined a boys' club and come under the influence of some kind, sympathetic club leader, who was able to inspire hope and point the way to

better things and how to attain them. Perhaps the most far-reaching results of club work are to instill into the boy a greater respect for the dignity of labor and to show him that life on the farm can be made more comfortable and independent than in any other profession.

Notwithstanding the difficulties encountered by the club workers, the total enrollment in all clubs in 1921 was 106,405. The total number of organized community clubs, including all demonstrations, was 4,364. The clubs held 15,767 community meetings, or an average of 3.6 to each club. The number of encampments and short courses held for instruction and recreation was 469. More than 1,100 club boys entered college for the first time in 1921. A poll of the students in college from one State showed that more than 50 per cent of those from the farms had been club members. During the year, 7,373 boys were sent to the county and State fairs, short courses, encampments, and on other educational trips. More than 2,000 club shows and exhibits were held, at which the boys won $127,265 in prizes. The bankers and others loaned the club members for all purposes approximately $242,000. The total market value of products grown by members reporting was $1,500,000. The estimated value of the crops grown by those not reporting was $657,301.

Organization.

Two methods were pursued in making up the plan of work for the State: (1) Plans were developed in the State office and submitted at the annual agents' conference for approval; (2) the plan of work was developed by committees of agents in conference with the State agents and specialists. The State plans mentioned above provide only for the general policies and broad outlines for conducting the work.

Several States are attempting to federate the agricultural clubs into a county organization and the county organizations into State organizations. Under this scheme, when a county organization is perfected the president and secretary of the local clubs form the executive committee for the county organization. Under the supervision of the county agent, a county program for the year is worked out through this committee. Each county organization elects its representative on the State executive committee. The State committee meets annually at the State camp or some short course to transact any business of a state-wide nature and select State officers.

A new feature that has attracted considerable attention is the self-financing plan, by which the county executive committee draws up the club budget for the county. The budget covers the expenses necessary to conduct a county-wide program, including those of the county executive committee, representatives to the State short course or camp, for judging teams, and one or more community prizes. Each local club raises its pro rata share in any way it sees fit, usually by entertainments at which admission fees are charged. This plan gives the club members business training and creates a feeling of responsibility and pride in seeing that their work is properly conducted. Each member not only keeps his own demonstrations in good shape, but feels an interest in the progress and success of the work as a com-

munity proposition. It is very interesting to note the business ability shown by club members in working out details of the plan.

Under the self-financing plan it is necessary to have more community meetings where the social features may be discussed as well as ways and means. It relieves the county agent of many details, as the community club is made responsible for securing enrollments, keeping the records, and collecting final reports. One State reports 16 counties adopting this plan, with more than $5,000 pledged and raised, and 110 community clubs collected the members' record books and submitted annual reports to the county agents. Thirty-three clubs report 100 per cent record books collected, and one county reports 100 per cent reports received.

DEMONSTRATIONS.

Corn.—Corn club demonstrations lead the list. The value of good seed and improved methods in growing the crop are as evident now as in previous years. The average of the boys' demonstration acres was 44.9 bushels, as compared with 38.6 bushels in adult demonstrations, and an average yield of 22.1 bushels in all the Southern States. To promote interest in soil improvement, the boys were encouraged to plant legumes in their corn. Some agents have adopted the plan of allowing the boy credit for an aditional bushel of corn for every bushel of peas or beans grown. This extract from an agent's report illustrates the influence of the corn demonstrations:

> While walking over the farm of Walter Smith, a farmer in moderate circumstances, we discussed corn growing and farming in general. We visited the club acres of his two boys. I mentioned to him the great improvement in farming which had taken place in the county and was telling him what I thought brought this change about. He said: "While that may be true, my two boys have taught me more about corn growing than I ever knew in my life. Until you started them in club work farming was a drag for us all, but now the boys have put enthusiasm into our work and the farm is paying for the first time since I have owned it.

Cotton.—Low prices caused a reduction in the cotton demonstrations. The yield of those who did grow cotton was satisfactory. The most valuable part of the boys' cotton club work is the unusual interest in the growing of improved varieties on a community basis.

Potatoes.—There was an increased number of demonstrations with both white and sweet potatoes. In some instances, especially with white potatoes, the members were interested in the growing of certified seed for planting purposes. Some interest was taken in the community centers in grading and standardizing the products. Peanut demonstrations have also been popular with the club boys; but, owing to the very low prices, the demonstrations with this crop were greatly reduced.

Pigs.—Of the live-stock work, pig club demonstrations are decidedly the most popular. They are conducted along three lines: (1) Growing and fattening a pig for meat or for the market; (2) growing a purebred pig for breeding purposes; and (3) demonstrations with a sow and litter. The fattening demonstration is considered the best for beginners. It gives the boy valuable information in the feeding and care of animals, preparatory to taking up the

other two lines. The demonstrations in growing pigs for breeding purposes are still encouraged in some sections. The chief disadvantage is the relatively small percentage of pigs that will develop into animals of individual merit for breeding purposes. Serious mistakes have been made in inducing club boys to buy high-priced pigs, supposed to be well bred, which afterwards prove to be of little value for breeding stock. The training and experience received from such demonstrations should be the main feature. Medium-priced, well bred stock will serve this purpose as well as the high-priced; and if the boy wishes to sell his pig he does not have to get an unusual price to make a profit. Where the boy has had experience in handling live stock and expects to make a permanent business of it, it would seem a good policy for him to procure a bred gilt if he can afford it. This will give him quicker returns and also insure his getting a good type of animal to start with.

More than 50 per cent of the enrolled pig club members completed their work and sent in final reports. The total number of animals included in these reports was 19,240.

Beef cattle.—During the past year the number of beef-cattle demonstrations with boys has grown in some sections and decreased in others. More than 874 boys carried their demonstrations through to completion. The beef-cattle demonstrations seem to be pretty well divided between those in fattening and those in growing young stock for breeding purposes. As in the pig-club work, it is found best for the boy to start out with a fattening demonstration. This furnishes the easiest and cheapest way of getting some needed experience in caring for a calf. Some valuable prizes have been won by boys in both fattening and breeding contests. The principal drawback to the breeding demonstration is the long wait for profits. A few good demonstrations in dairying and other live-stock work have been carried on by the boys.

Poultry.—A considerable amount of good work with poultry was reported. More than 6,851 reports on completed demonstrations with poultry were received, showing satisfactory profits.

Short Courses, Camps, Tours, Etc.

Club rallies and pageants are still popular and are beneficial in attracting the interest and support of business people, but short courses, camps, and club tours afford the best training and educational advantages. There are three kinds of short courses—county, district, and State. The county short courses are usually conducted under the auspices of the county club organization; the district short courses are held at some district high school and are usually participated in by members from a number of counties; and the State short course is conducted at the State headquarters. These courses not only give valuable instruction but encourage the members to obtain higher education. The camps give educational advantages and also furnish wholesome recreation for the boys. It also develops initiative and self-reliance. Usually the men and women agents work up programs for these camps that allow the joint participation of the girls and boys in most of the exercises and instruction.

Club Judging Work.

Judging work is done in all the States and may be with grain or animals. It stimulates interest among the club members in better crops and animals, but the greatest benefit is perhaps the competitive spirit aroused in clubs or communities. It is estimated that more than 15,000 boys and girls entered the contests and received some valuable training in live-stock judging as a result of the international club judging contest at the Southeastern States Exposition at Atlanta last year. The various prizes offered in connection with the judging contest at State and interstate fairs have made it possible for quite a large number of prize-winning boys and girls to secure trips of great educational value, aside from the pleasure and experience of seeing and meeting people from other sections.

NEGRO EXTENSION WORK.

No other class of agricultural people was in quite such a distressed condition at the beginning of 1921 as the negro farmers. As the majority of negro farmers are tenants, there is every year a considerable amount of moving from one farm to another. In 1921 there was not only unrest and moving among negro tenants but many of their white landlords were in as bad financial straits as the negroes themselves. Thousands of the best negro farmers had to give up all their live stock and equipment to satisfy their creditors. Such a condition made the duties of the negro extension workers, numbering 154 men and 84 women agents, very difficult. However, as the season progressed, their heroic efforts to stabilize conditions among their people were rewarded with considerable success. Probably no class of agents in the whole extension organization rendered a more effective service in meeting the conditions that existed in many of the rural districts. The success attained in overcoming the discouraging prospect and closing the year with reasonably satisfactory results again illustrates the fundamental principle that the most successful way to reach the average man or woman on the farm is by personal contact with him and his family.

In those communities where the work has been carried on longest, it was possible to do a great deal through the negro organizations, such as community farmers' clubs, fair associations, churches, and schools. In a few more advanced sections county advisory boards, made up of representatives of the local clubs, have been organized. All of these organizations have been helpful to the agents in carrying out their plan of work in such a way as to benefit the maximum number of people.

Farm Demonstration Work.

There were reported in 1921 885 negro farm clubs, with a total membership of 40,173, 269 of these clubs, with a membership of 12,215, being organized during the year. Considerable assistance was given the negro farmers in organizing to sell and purchase cooperatively. It was reported that the farmers purchased through these associations during the year $372,004 worth of supplies, at a saving to them of more than $80,000.

There were fewer reports from demonstrators and club members than last year; but, considering the conditions under which they were

obtained, the total results are all the more striking. The men agents report 14,116 demonstrations in field crops, covering about 68,948 acres. The chief crops were corn, cotton, oats, cowpeas, peanuts, and potatoes. The increased yields reported on the demonstration farms range from 40 to 75 per cent over adjoining farms where ordinary methods were used.

Some of the miscellaneous work done through the negro men agents, as shown in their reports, is as follows: 4,131 home orchards inspected, 2,456 pruned, and 1,253 sprayed; 643 new home orchards, with a total of 3,193 trees set out; 2,553 farmers induced to terrace land; 3,459 grew grazing crops for hogs for the first time. About 8,000 cattle, hogs, and horses were treated for disease; 18,509 home gardens were planted; and 5,315 farmers planted cover crops for improving the soil. The agents made 92,094 visits, traveled 453,506 miles, and received 23,694 calls at their homes or offices from colored farmers asking for instruction and advice on various subjects.

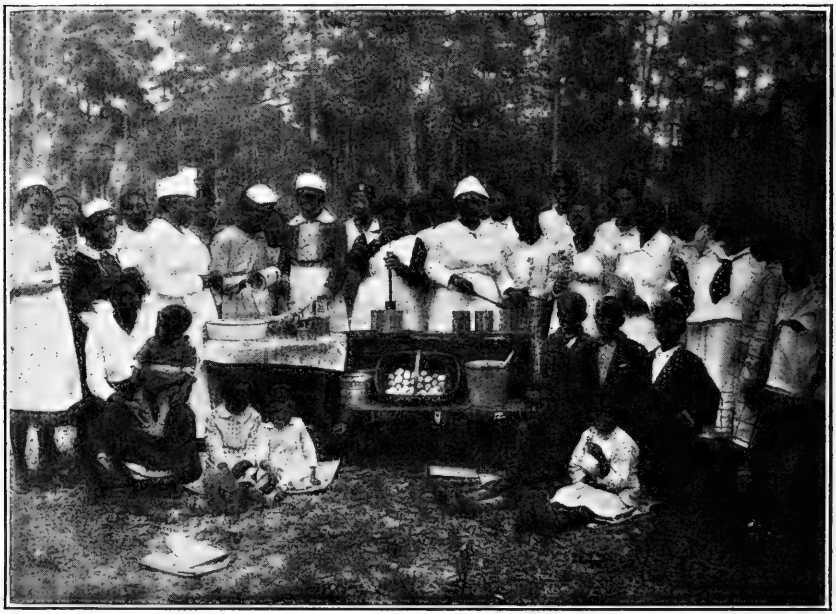

FIG. 11.—A group being instructed in canning and other home demonstration work.

HOME DEMONSTRATION WORK.

The negro home demonstration agents did extremely practical work among the negro women and girls (Fig. 11). Demonstrations and instructions were given in food production, preservation, and preparation; poultry raising; home dairying; health; and sewing and handicraft. There were organized 3,262 women's clubs, with 21,287 members enrolled, and 2,482 girls' clubs, with 16,781 members. It is estimated that 28,000 other women and girls, not members of the

clubs, adopted improved practices through the influence of the work. The women agents secured 20,788 garden demonstrators, and 12,853 canning demonstrators, and assisted in the starting of 4,467 orchards and vineyards. The total value of the poultry products used in the home and sold by the club members was $60,583. More than 300,000 pounds of butter for home use and for market were produced under the instruction of these agents. The agents assisted in establishing lunches which included milk in 616 schools. The general improvement in the health of the children attending these schools was very noticeable. More than 500,000 women and girls were instructed in the curing and canning of meats, valued at $72,000. The total number of containers of canned fruit and vegetables reported was 1,228,544. The value of all the canned goods and dried products was $1,122,568. Approximately 40,000 home and farm conveniences, such as laundry, poultry, and dairy equipment, were installed. Much of the new equipment was homemade. The agents gave 5,674 women and girls instruction in sewing, dyeing, and rug and broom making. It was found that such work is very popular with the negro women and girls. The home demonstration agents visited 16,978 homes to give instruction and demonstrations. Talks and demonstrations were given at 8,090 club meetings, with an attendance of 571,291.

FIG. 12.—Field instruction of members of a farm-makers' club.

The men and women agents combined efforts in establishing 2,492 poultry demonstrations and placed 2,320 purebred flocks, influenced the purchase of 1,379 family cows, assisted in improving and remodeling 5,059 dwellings, screening 11,549, and improving the sanitary conditions in 7,945 homes. More than 10,000 home grounds were improved and beautified by the planting of trees, shrubs, flowers, and vines.

CLUB WORK.

Home makers' clubs for negro boys were in operation in all of the States during the year (Fig. 12). The total enrollment in crop clubs was 8,753, and in live-stock clubs 5,485. Of these, 6,717 completed the work and made detailed reports, showing a value of all products of $229,748. Results of the negro girls' club work are included in the report of the home demonstration agents (p. 36).

CONCLUSIONS.

The demonstration method of teaching, as practiced by the extension forces in the 15 Southern States, is definitely approved and supported as a part of the educational system of these States. In spite of being launched to meet an emergency, its ideals and purposes frequently misunderstood, sometimes discouraged and antagonized in quarters where encouragement and support was expected, and often inadequately financed, the agricultural extension organization has steadily developed into one of the most efficient bodies of organized workers in the country. This was evidenced during the war by the frequency of the calls made upon this organization by other departments of the Government and other agencies for aid in carrying out various emergency propositions. The agents, in a degree, at least, held their influence with the farmers during the unprecedented period of prosperity, and were the first to offer suggestions for overcoming the discouragement and demoralization following the precipitate fall of prices of farm products. Thousands of farmers and business men were directly benefited by timely and helpful suggestions of the extension agents in 1921. Though there was a general demand for retrenchment in expenditure of public funds, the proportion of States and counties that failed to support the extension work and the county agents was remarkably small. This leads those responsible for the administration of the organization to feel that, on the whole, a real worth-while public need is being met successfully. Public confidence in the organizations seems to be well established. The leaders and most of the county workers feel the need of holding to the great fundamental idea of continuing a considerable number of concrete farm and home demonstrations. The confident belief of those most concerned is that the outlook for constant growth and a useful service by the cooperative extension work in every State is very encouraging.

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